The following listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

- 1. (Amended) A method for enhancing bone formation in a mammal in need thereof comprising administering to said mammal an effective amount of a lanthanum (III) compound, wherein said mammal has (a) a bone fracture, bone trauma, or a bone deficit condition associated with post-traumatic bone surgery, post-prosthetic joint surgery, post-plastic bone surgery, post-dental surgery, bone chemotherapy treatment or bone radiotherapy treatment, and/or (b) a bone remodeling disorder selected from the group consisting of osteoporosis, Paget's disease, osteoarthritis, rheumatoid arthritis, achondroplasia, osteochodrytis, hyperparathyroidism, osteogenesis imperfecta, congenital hypophosphatasia, fibromatous lesions, fibrous displasia, multiple myeloma, abnormal bone turnover, osteolytic bone disease, osteomalacia and periodontal disease.
  - 2. (Original) A method according to claim 1 wherein the mammal is a human.
  - 3. (Cancelled)
  - 4. (Cancelled)
- 5. (Amended) A method according to claim 2 4 wherein the bone remodelling disorder is selected from the group consisting of osteoporosis, Paget's disease, osteoarthritis, rheumatoid arthritis, achondroplasia, osteochodrytis, hyperparathyroidism, osteogenesis imperfecta, congenital hypophosphatasia, fribromatous lesions, fibrous displasia, multiple myeloma, abnormal bone turnover, osteolytic bone disease, rickets, osteomalacia and periodontal disease.
- 6. (Amended) A method according to claim 2 4 wherein the bone remodeling disorder is osteoporosis.

- 7. (Original) A method according to claim 6 wherein osteoporosis is any one of primary osteoporosis, secondary osteoporosis, post-menopausal osteoporosis, male osteoporosis and steroid induced osteoporosis.
- 8. (Amended) A method according to claim 2 3 wherein the human has a bone fracture, bone trauma, or a condition associated with post-traumatic bone surgery, post-prosthetic joint surgery, post-plastic bone surgery, post-dental surgery, bone chemotherapy treatment or bone radiotherapy treatment.
- 9. (Original) A method according to claim 2 wherein the lanthanum (III) compound is selected from the group consisting of lanthanum chloride, lanthanum carbonate, lanthanum salts, chelates and derivatives thereof, lanthanum resins and lanthanum absorbants.
- 10. (Original) A method according to claim 9 wherein lanthanum (III) compound is selected from the group consisting of lanthanum carbonate and lanthanum chloride.
- 11. (Original) A method according to claim 2 wherein the effective amount of lanthanum (III) compound is from 0.05 mg/Kg/Day to 50 mg/Kg/Day.
- 12. (Original) A method according to claim 11 wherein the effective amount of lanthanum (III) compound is from 0.1 mg/Kg/Day to 10 mg/Kg/Day.
- 13. (Amended) A method for increasing bone density in a mammal in need thereof comprising administering to said mammal an effective amount of a lanthanum (III) compound, wherein said mammal has (a) a bone fracture, bone trauma, or a bone deficit condition associated with post-traumatic bone surgery, post-prosthetic joint surgery, post-plastic bone surgery, post-dental surgery, bone chemotherapy treatment or bone radiotherapy treatment, and/or (b) a bone remodeling disorder selected from the group consisting of osteoporosis, Paget's disease, osteoarthritis, rheumatoid arthritis, achondroplasia, osteochodrytis, hyperparathyroidism, osteogenesis imperfecta, congenital hypophosphatasia, fibromatous lesions, fibrous displasia, multiple myeloma, abnormal bone turnover, osteolytic bone disease, osteomalacia and

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## periodontal disease.

- 14. (Amended) A method for stimulating osteoblast differentiation in a mammal in need thereof comprising administering to said mammal and contacting said osteoblasts with an effective amount of lanthanum (III) compound thereby stimulating differentiation, wherein said mammal has (a) a bone fracture, bone trauma, or a bone deficit condition associated with post-traumatic bone surgery, post-prosthetic joint surgery, post-plastic bone surgery, post-dental surgery, bone chemotherapy treatment or bone radiotherapy treatment, and/or (b) a bone remodeling disorder selected from the group consisting of osteoporosis, Paget's disease, osteoarthritis, rheumatoid arthritis, achondroplasia, osteochodrytis, hyperparathyroidism, osteogenesis imperfecta, congenital hypophosphatasia, fibromatous lesions, fibrous displasia, multiple myeloma, abnormal bone turnover, osteolytic bone disease, osteomalacia and periodontal disease.
- 15. (Amended) A method for inhibiting osteoclast differentiation in a mammal in need thereof comprising administering to said mammal and contacting said osteoclasts with an effective amount of lanthanum (III) compound thereby inhibiting differentiation, wherein said mammal has (a) a bone fracture, bone trauma, or a bone deficit condition associated with post-traumatic bone surgery, post-prosthetic joint surgery, post-plastic bone surgery, post-dental surgery, bone chemotherapy treatment or bone radiotherapy treatment, and/or (b) a bone remodeling disorder selected from the group consisting of osteoporosis, Paget's disease, osteoarthritis, rheumatoid arthritis, achondroplasia, osteochodrytis, hyperparathyroidism, osteogenesis imperfecta, congenital hypophosphatasia, fibromatous lesions, fibrous displasia, multiple myeloma, abnormal bone turnover, osteolytic bone disease, osteomalacia and periodontal disease.
- 16. (Amended) A method for activating bone formation activity of differentiated osteoblasts in a mammal in need thereof comprising administering to said mammal and contacting said osteoblasts with an effective amount of lanthanum (III) compound thereby stimulating bone formation, wherein said mammal has (a) a bone fracture, bone trauma, or a bone deficit condition associated with post-traumatic bone surgery, post-prosthetic joint surgery.

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post-plastic bone surgery, post-dental surgery, bone chemotherapy treatment or bone radiotherapy treatment, and/or (b) a bone remodeling disorder selected from the group consisting of osteoporosis, Paget's disease, osteoarthritis, rheumatoid arthritis, achondroplasia, osteochodrytis, hyperparathyroidism, osteogenesis imperfecta, congenital hypophosphatasia, fibromatous lesions, fibrous displasia, multiple myeloma, abnormal bone turnover, osteolytic bone disease, osteomalacia and periodontal disease.

- A method for simultaneously stimulating osteoblast differentiation 17. (Amended) and inhibiting osteoclast differentiation in a mammal having a bone remodeling disorder selected from the group consisting of osteoporosis, Paget's disease, osteoarthritis, rheumatoid arthritis, achondroplasia, osteochodrytis, hyperparathyroidism, osteogenesis imperfecta, congenital hypophosphatasia, fibromatous lesions, fibrous displasia, multiple myeloma, abnormal bone turnover, osteolytic bone disease, osteomalacia and periodontal disease, or being at risk of developing a bone remodeling disorder, which comprises comprising administering to said mammal an effective amount of lanthanum (III) compound.
- (Original) A method for enhancing bone formation in a mammal in need thereof 18. comprising administering to said mammal an effective amount of a lanthanum (III) compound and at least one bone enhancing agent.
- (Original) A method according to claim 18 wherein said bone enhancing agent is 19. selected from the group consisting of a synthetic hormone, a natural hormone, oestrogen, calcitonin, tamoxifen, a biphosphonate, a biphosphonate analog, vitamin D, a vitamin D analog, a mineral supplement, a statin drug, a selective oestrogen receptor modulator and sodium fluoride.
  - 20. (Cancelled)
  - 21. (Cancelled)
  - (Withdrawn) A pharmaceutical composition for the treatment or prevention of a 22.

bone remodeling disorder comprising a lanthanum (III) compound and a bone enhancing agent.

- 23. (Amended) A method for inhibiting osteoclastic differentiation whereby to manage or; treat or achieve prophylaxis of a bone disease which comprises administering to a human or animal subject suffering from, or susceptible to said bone disease a therapeutically or prophylactically effective amount of lanthanum compound.
- 24. (Amended) A method for activating osteoblastic differentiation whereby to manage or; treat or achieve prophylaxis of a bone disease which comprises administering to a human or animal subject suffering from, or susceptible to said bone disease a therapeutically or prophylactically effective amount of lanthanum compound; and optionally activating osteoblastic differentiation.

25. (Cancelled)

- 26. (Previously Added) A method according to claim 1, wherein said lanthanum (III) compound is a lanthanum carbonate.
- 27. (Previously Added) A method according to claim 13, wherein said lanthanum (III) compound is a lanthanum carbonate.
- 28. (Previously Added) A method according to claim 14, wherein said lanthanum (III) compound is a lanthanum carbonate.
- 29. (Previously Added) A method according to claim 15, wherein said lanthanum (III) compound is a lanthanum carbonate.
- 30. (Previously Added) A method according to claim 16, wherein said lanthanum (III) compound is a lanthanum carbonate.
  - 31. (Previously Added) A method according to claim 17, wherein said lanthanum

(III) compound is a lanthanum carbonate.

- 32. (Previously Added) A method according to claim 18, wherein said lanthanum (III) compound is a lanthanum carbonate.
- 33. (Withdrawn) A composition according to claim 22, wherein said lanthanum (III) compound is a lanthanum carbonate.
- 34. (Previously Added) A method according to claim 23, wherein said lanthanum (III) compound is a lanthanum carbonate.
- 35. (Previously Added) A method according to claim 24, wherein said lanthanum (III) compound is a lanthanum carbonate.
- 36. (Previously Added) A method according to claim 1, wherein said lanthanum (III) compound is a lanthanum carbonate hydrate.
- 37. (Previously Added) A method according to claim 1, wherein said lanthanum (III) compound is lanthanum carbonate tetrahydrate.
- 38. (New) A method according to claim 26, wherein said lanthanum (III) compound is administered in an amount of 0.01-100 mg/kg/day.
- 39. (New) A method according to claim 26, wherein said lanthanum (III) compound is administered in an amount of 0.05-50 mg/kg/day.
- 40. (New) A method according to claim 26, wherein said lanthanum (III) compound is administered in an amount of 0.1-10 mg/kg/day.